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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,311	10/07/2003	Sheng-Tsung Wang	MR957-1404	3218

4586 7590 03/27/2006

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ELLICOTT CITY, MD 21043

EXAMINER

SUHOL, DMITRY

ART UNIT	PAPER NUMBER
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3725

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/679,311	Applicant(s) WANG, SHENG-TSUNG	
	Examiner Dmitry Suhol	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang '310 in view of Morgenthaler et al (EP 0446819 A2) and further in view of applicants own admission. Wang discloses an actuating mechanism containing most of the claimed elements including a power source (col. 2, lines 63-65), a transmission for passing movement (figure 2) including a planetary gear set (242) having a sun gear (3) fixedly disposed in the front portion of the pipe bender (col. 3, line 1), a central shaft driving a second axis for connection to the power source (2 and col. 2, lines 40-42), an actuating shaft being in the planetary gear set (shaft 4 including portion 41), planetary pinions (242) rotatable on respective shafts (232) figures 2-3, the planet pinions engaged with both the central shaft and the inner toothed portion of the sun gear (figures 2-3).

Although Wang discloses most of the claimed elements, the reference fails to teach a crown gear connected with the lower end of the central shaft and an actuating pinion securely connected with an output shaft of the power source and engaged with the crown gear. However, Morgenthaler discloses a pipe bending machine which

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teaches that it is known to manufacture such a machine with a connection between a motor (40) and a transmission for a pipe bender through the use of a crown gear (44) and associated pinion (45) (see figure 2). Therefore it would have been obvious to one having ordinary skill in the art, at the time of the claimed invention, to manufacture the device of Wang with such a connection means between the motor and transmission for the purpose of providing a durable and reliable power transfer linkage, especially since Wang clearly states in col. 2, lines 63+ that his central shaft portion 42 may be provided with a gear which engages other gears of the power source.

Regarding the power source specifics as required by claim 3, applicants clearly show in figure 6 that a power source with all of the claimed elements including an output shaft is known to be used with a pipe bending machine in the prior art (see figure 6). Therefore it would have been obvious to utilize the power source with all of the claimed features in the device of Wang, as modified by Morgenthaler, for the purpose of supplying an appropriate amount of power/torque to the device at the desired power draw.

The relationship between an output shaft (shown in applicants prior art figure 6) and a central shaft (2) of Wang being transverse relative each other would have been obvious in view of Morgenthaler since the reference clearly discloses that shaft 38 and the power source shaft (located between gear 44 and motor 40) have such a relationship for the purpose of minimizing parts in order to produce a stream lined machine and would have been obvious to incorporate in the device of Wang for such a purpose.

Regarding the limitation of a power source being disposed adjacent to the transmission as required by claim 3, are taught in both Morgenthaler and applicants figure 6 as admitted prior art for purposes of minimizing parts in order to produce a stream lined machine and therefore would have been obvious to incorporate in the device of Wang for such a purpose.

Response to Arguments

Applicant's arguments filed 1/17/06 have been fully considered but they are not persuasive. Applicants argue that the Wang and Morgenthaler reference do not teach a power source including a secondary planetary gear set as claimed. In response the examiner points out that applicants admitted prior art is relied upon to teach such structural features (see above rejection).

Applicants further argue that Morgenthaler and the admitted prior art fail to disclose a power source being disposed adjacent to the transmission. In response the examiner points out that it has been held that the term "adjacent" does not require absolute contact, but requires relatively close position. Ex parte Hadsel (PO BdApp) 109 USPQ) 509 and Ex Parte Appeldorn & Gilkeson (PTO BdApp 159 USPQ 791). Therefore the Morgenthaler reference and the admitted prior art clearly encompass such a limitation.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Suhol whose telephone number is 571-272-4430. The examiner can normally be reached on Mon - Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dmitry Suhol
Primary Examiner
Art Unit 3725

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